EVENINGS AT HOME;

OR,

THE JUVENILE BUDGET OPENED:

CONSISTING OF

A VARIETY OF MISCELLANEOUS PIECES

FOR

THE INSTRUCTION AND AMUSEMENT

OF

YOUNG PERSONS.

BY J. AIKIN, M.D.

AND

MRS. BARBAULD.

IN SIX VOLUMES.

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SIXTEENTH EVENING.

PERSEVERANCE AGAINST FORTUNE.

A STORY.

THEODORE was a boy of lively parts and engaging manners; but he had the failing of being extremely impatient in his temper, and inclined to extremes. He was ardent in all his pursuits, but could bear no disappointment; and if the least thing went wrong, he threw up what he was about in a pet, and could not be prevailed upon to resume it. His father (Mr. *Carleton*) had given him a bed in the garden, which he had cultivated with great delight. The borders were set with double daisies of different colours, next to which was a row

of auriculas and polyanthuses. Beyond were stocks and other taller flowers and shrubs; and a beautiful damask rose graced the centre. This rose was just budding, and *Theodore* watched its daily progress with great interest. One unfortunate day, the door of the garden being left open, a drove of pigs entered, and began to riot on the herbs and flowers. An alarm being sounded, *Theodore* and the servant boy rushed upon them, smacking their whips. The whole herd, in affright, took their course across *Theodore's* flower-bed, on which some of them had before been grazing. Stocks, daisies, and auriculas were all trampled down or torn up: and, what was worst of all, a large old sow ran directly over the beautiful rose tree, and broke off its stem level with the ground. When *Theodore* came up and beheld all the mischief, and especially his favourite rose strewed on

the soil, rage and grief choked his utterance. After standing awhile the picture of despair, he snatched up a spade that stood near, and with furious haste dug over the whole bed, and whelmed all the relics of his flowers deep under the soil. This exertion being ended, he burst into tears, and silently left the garden.

His father, who had beheld the scene at a distance, though somewhat diverted at the boy's childish violence, yet began seriously to reflect on the future consequences of such a temper, if suffered to grow up without restraint. He said nothing to him at the time, but in the afternoon he took him a walk into a neighbouring parish. There was a large wild common, and at the skirts of it, a neat farm-house, with fields lying round it, all well fenced, and cultivated in the best manner. The air was sweetened with the bean-flower and

clover. An orchard of fine young fruit trees lay behind the house; and before it a little garden, gay with all the flowers of the season. A stand of beehives was on the southern side, sheltered by a thick hedge of honeysuckle and sweet brier. The farm-yard was stocked with pigs and poultry. A herd of cows with full udders was just coming home to be milked. Every thing wore the aspect of plenty and good management. The charms of the scene struck *Theodore* very forcibly, and he expressed his pleasure in the warmest terms. This place, said his father, belongs to a man who is the greatest example I know of patient fortitude bearing up against misfortune; and all that you see is the reward of his own perseverance. I am a little acquainted with him; and we will go in and beg a draught of milk, and try if we can prevail upon him to tell us his story. *Theodore* willingly accompanied

his father. They were received by the farmer with cordial frankness. After they were seated, Mr. *Hardman* (says Mr. *Carleton*), I have often heard of part of your adventures, but never had a regular account of the whole. If you will favour me and my little boy with the story of them, we shall think ourselves much obliged to you. Lack a day! sir, (said he), there's little in them worth telling of, as far as I know. I have had my ups and downs in the world, to be sure, but so have many men besides. However, if you wish to hear about them, they are at your service; and I can't say but it gives me pleasure sometimes to talk over old matters, and think how much better things have turned out than might have been expected. Now I am of opinion (said Mr. C.) that from your spirit and perseverance a good conclusion might always have been expected. You are pleased to compli-

ment, sir (replied the farmer); but I will begin without more words.

You may perhaps have heard that my father was a man of good estate. He thought of nothing, poor man! but how to spend it; and he had the uncommon luck to spend it twice over. For when he was obliged to sell it the first time, it was bought in by a relation, who left it him again by his will. But my poor father was not a man to take warning. He fell to living as he had done before, and just made his estate and his life hold out together. He died at the age of five and forty, and left his family beggars. I believe he would not have taken to drinking, as he did, had it not been for his impatient temper, which made him fret and vex himself for every trifle, and then he had nothing for it but to drown his care in liquor.

It was my lot to be taken by my mother's brother, who was master of a mer-

chantship. I served him as an apprentice several years, and underwent a good deal of the usual hardship of a sailor's life. He had just made me his mate in a voyage up the Mediterranean when we had the misfortune to be wrecked on the coast of Morocco. The ship struck at some distance from shore, and we lay a long stormy night with the waves dashing over us, expecting every moment to perish. My uncle and several of the crew died of fatigue and want, and by morning but four of us were left alive. My companions were so disheartened, that they thought of nothing but submitting to their fate. For my part, I thought life still worth struggling for; and the weather having become calmer, I persuaded them to join me in making a kind of raft, by the help of which, with much toil and danger, we reached the land. Here we were seized by the barbarous inhabitants,

and carried up the country for slaves to the emperor. We were employed about some public buildings, made to work very hard with the whip at our backs, and allowed nothing but water and a kind of pulse. I have heard persons talk as if there was little in being a slave but the name; but they who have been slaves themselves I am sure will never make light of slavery in others A ransom was set on our heads, but so high, that it seemed impossible for poor friendless creatures like us ever to pay it. The thought of perpetual servitude, together with the hard treatment we met with, quite overcame my poor companions. They drooped and died one after another. I still thought it not impossible to mend my condition, and perhaps to recover my freedom. We worked about twelve hours in the day, and had one holiday in the week. I employed my leisure time in learning

to make mats and flag baskets, in which I soon became so expert as to have a good many for sale, and thereby got a little money to purchase better food, and several small conveniences. We were afterwards set to work in the emperor's gardens: and here I showed so much good will and attention, that I got into favour with the overseer. He had a large garden of his own; and he made interest for me to be suffered to work for him alone, on the condition of paying a man to do my duty. I soon became so useful to him, that he treated me more like a hired servant than a slave, and gave me regular wages. I learned the language of the country, and might have passed my time comfortably enough, could I have accommodated myself to their manners and religion, and forgot my native land. I saved all I could in order to purchase my freedom; but the ransom

was so high that I had little prospect of being able to do it for some years to come. A circumstance, however, happened which brought it about at once. Some villains one night laid a plot to murder my master and plunder his house. I slept in a little shed in the garden where the tools lay; and being awakened by a noise, I saw four men break through the fence, and walk up an alley towards the house. I crept out with a spade in my hand, and silently followed them. They made a hole with instruments in the house-wall big enough for a man to enter at. Two of them had got in, and the third was beginning to enter when I rushed forward, and with the blow of my spade clove the scull of one of the robbers, and gave the other such a stroke on the shoulder as disabled him. I then made a loud outcry to alarm the family. My master and his son, who

lay in the house, got up, and having let me in, we secured the two others, after a sharp conflict, in which I received a severe wound with a dagger. My master, who looked upon me as his preserver, had all possible care taken of me, and as soon as I was cured, made me a present of my liberty. He would fain have kept me with him, but my mind was so much bent on returning to my native country, that I immediately set out to the nearest seaport, and took my passage in a vessel going to Gibraltar.

From this place I returned in the first ship for England. As soon as we arrived in the Downs, and I was rejoicing at the sight of the white cliffs, a man of war's boat came on board, and pressed into the king's service all of us who were seamen. I could not but think it hard that this should be my welcome at home after a long slavery,

but there was no remedy. I resolved to do my duty in my station, and leave the rest to Providence. I was abroad during the remainder of the war, and saw many a stout fellow sink under disease and despondence. My knowledge of seamanship got me promoted to the post of a petty officer, and at the peace I was paid off, and received a pretty sum for wages and prize-money. With this I set off for London. I had experienced too much distress from want, to be inclined to squander away my money, so I put it into a banker's hands, and began to look out for some new way of life.

Unfortunately, there were some things of which I had no more experience than a child, and the tricks of London were among these. An advertisement offering extraordinary advantages to a partner in a commercial concern, who could bring a small ca-

pital, tempted me to make inquiry about the matter; and I was soon cajoled by a plausible artful felow to venture my whole stock in it. The business was a manufacture, about which I knew nothing at all; but as I was not afraid of my labour, I set about working as they directed me, with great diligence, and thought all was going on prosperously. One morning, on coming to the office, I found my partners decamped; and the same day I was arrested for a considerable sum due by the partnership. It was in vain for me to think of getting bail, so I was obliged to go to prison. Here I should have been half-starved, but for my Moorish trade of mat making, by the help of which I bettered my condition for some months; when the creditors, finding that nothing could be got out of me, suffered me to be set at liberty.

I was now in the wide world with-

out a farthing or a friend, but I thanked God that I had health and limbs left. I did not choose to trust the sea again, but preferred my other new trade of gardening; so I applied to a nurseryman near town, and was received as a day-labourer. I set myself cheerfully to work, taking care to be in the grounds the first man in the morning and the last at night. I acquainted my employer with all the practices I had observed in Morocco, and got him, in return, to instruct me in his own. In time, I came to be considered as a skilful workman, and was advanced to higher wages. My affairs were in a flourishing state. I was well fed, and comfortably lodged, and saved money into the bargain. About this time I fell in company with a young woman at service, very notable and well behaved, who seemed well qualified for a wife to a working man.

I ventured to make an offer to her which proved not disagreeable; and after we had calculated a little how we were to live, we married. I took a cottage with an acre or two of land to it, and my wife's savings furnished our house and bought a cow. All my leisure time I spent upon my piece of ground, which I made very productive, and the profits of my cow, with my wages, supported us very well. No mortal, I think, could be happier than I was after a hard day's work, by my own fire-side, with my wife beside me, and our little infant on my knee.

After this way of life had lasted two or three years, a gentleman who had dealt largely with my master for young plants, asked him if he could recommend an honest industrious man for a tenant, upon some land that he had lately taken in from the sea.

My master, willing to do me a kindness, mentioned me. I was tempted by the proposal, and going down to view the premises, I took a farm upon a lease at a low rent, and removed my family and goods to it, one hundred and fifty miles from London. There was ground enough for money, but much was left to be done for it in draining, manuring, and fencing. Then it required more stock than I was able to furnish; so, though unwilling, I was obliged to borrow some money of my landlord, who let me have it at a moderate interest. I began with a good heart, and worked late and early to put things into the best condition. My first misfortune was that the place proved unhealthy to us, I fell into a lingering ague, which pulled me down much, and hindered my business. My wife got a slow fever, and so did our eldest child (we had

now two, and another coming). The poor child died; and what with grief and illness, my wife had much ado to recover. Then the rot got among my sheep, and carried off the best part of my stock. I bore up against distress as well as I could; and by the kindness of my landlord, was enabled to bring things tolerably about again. We regained our health, and began to be seasoned to the climate. As we were cheering ourselves with the prospect of better times, a dreadful storm arose—it was one night in February—I shall never forget it—and drove the spring tide with such fury against our sea-banks, that they gave way. The water rushed in with such force, that all was presently a sea. Two hours before daylight I was awakened by the noise of the waves dashing against our house, and bursting in at the door. My wife had lain in about a month, and she and

I, and the two children, slept on a ground floor. We had just time to carry the children up stairs, before all was afloat in the room. When day appeared, we could see nothing from the windows but water. All the out-houses, ricks, and utensils were swept away, and all the cattle and sheep drowned. The sea kept rising, and the force of the current bore so hard against our house, that we thought every moment it must fall. We clasped our babies to our breasts, and expected nothing but present death. At length we spied a boat coming to us. With a good deal of difficulty it got under our window, and took us in with a servant-maid and boy. A few clothes was all the property we saved; and we had not left the house half an hour, before it fell, and in a minute nothing was to be seen of it. Not only the farm-house, but the farm itself was gone.

I was now again a ruined man, and, what was worse, I had three partners in my ruin. My wife and I looked at one another and then at our little ones, and wept. Neither of us had a word of comfort to say. At last, thought I, this country is not Morocco, however. Here are good souls that will pity our case, and perhaps relieve us. Then I have a character, and a pair of hands. Things are bad, but they might have been worse. I took my wife by the hand, and knelt down. She did the same. I thanked God for his mercy in saving our lives, and prayed that he would continue to protect us. We rose up with lightened hearts, and were able to talk calmly about our condition. It was my desire to return to my former master, the nursery-man; but how to convey my family so far without money was the difficulty. Indeed I was much worse than nothing, for I owed a good

deal to my landlord. He came down upon the news of the misfortune, and though his own losses were heavy, he not only forgave my debt and released me from all obligations, but made me a small present. Some charitable neighbours did the like; but I was most of all affected by the kindness of our late maid servant, who insisted upon our accepting of a crown which she had saved out of her wages. Poor soul! we had always treated her like one of ourselves, and she felt for us like one.

As soon as we had got some necessaries, and the weather was tolerable, we set out on our long march. My wife carried her infant in her arms. I took the bigger child on my back, and a bundle of clothes in my hand. We could walk but a few miles a day, but we now and then got a lift in an empty waggon or cart, which was a

great help to us. One day we met with a farmer returning with his team from market, who let me ride, and entered into conversation with me. I told him of my adventures, by which he seemed much interested; and learning that I was skilled in managing trees, he acquainted me that a nobleman in his neighbourhood was making great plantations, and would very likely be glad to engage me; and he offered to carry us to the place. As all I was seeking was a living by my labour, I thought the sooner I got it the better; so I thankfully accepted his offer. He took us to the nobleman's steward, and made known our case. The steward wrote to my old master for a character; and receiving a favourable one, he hired me as a principal manager of a new plantation, and settled me and my family in a snug cottage near it. He advanced us somewhat for a little furni-

ture and present subsistence; and we had once more a *home*. O Sir! how many blessings are contained in that word to those who have known the want of it!

I entered upon my new employment with as much satisfaction, as if I was taking possession of an estate. My wife had enough to do in taking care of the house and children; so it lay with me to provide for all, and I may say that I was not idle. Besides my weekly pay from the steward, I contrived to make a little money at leisure times by pruning and dressing gentlemen's fruit trees. I was allowed a piece of waste ground behind the house for a garden, and I spent a good deal of labour in bringing it into order. My old master sent me down for a present some choice young trees and flower roots, which I planted, and they throve wonderfully. Things went on almost

as well as I could desire. The situation being dry and healthy, my wife recovered her lost bloom, and the children srpung up like my plants. I began to hope that I was almost out of the reach of further misfortune; but it was not so ordered.

I had been three years in this situation, and increased my family with another child, when my lord died. He was succeeded by a very dissipated young man, deep in debt, who presently put a stop to the planting and improving of the estate, and sent orders to turn off all the workmen. This was a great blow to me; however, I still hoped to be allowed to keep my little house and garden, and I thought I could then maintain myself as a nursery-man and gardener. But a new steward was sent down, with directions to rack the tenants to the utmost. He asked me as much

rent for the place as if I had found the garden ready made to my hands; and when I told him it was impossible for me to pay it, he gave me notice to quit immediately. He would neither suffer me to take away my trees and plants, nor allow me any thing for them. His view, I found, was to put in a favourite of his own, and set him up at my expense. I remonstrated against this cruel injustice, but could obtain nothing but hard words. As I saw it would be the ruin of me to be turned out in that manner, I determined, rather hastily, to go up to London and plead my cause with my new lord. I took a sorrowful leave of my family, and walking to the next market town, I got a place on the outside of the stage coach. When we were within thirty or forty miles of London, the coachman overturned the carriage, and I pitched

directly on my head, and was taken up senseless. Nobody knew any thing about me; so I was carried to the next village, where the overseer had me taken to the parish workhouse. Here I lay a fortnight, much neglected, before I came to my senses. As soon as I became sensible of my condition, I was almost distracted in thinking of the distress my poor wife, who was near lying in, must be under on my account, not hearing any thing of me. I lay another fortnight before I was fit to travel, for besides the hurt on my head, I had a broken collar-bone, and several bruises. My money had somehow all got out of my pocket, and I had no other means of getting away than by being passed to my own parish. I returned in sad plight indeed, and found my wife very ill in bed. My children were crying about her, and almost starving. We should now have

been quite lost, had I not raised a little money by selling our furniture; for I was yet unable to work. As soon as my wife was somewhat recovered, we were forced to quit our house. I cried like a child on leaving my blooming garden and flourishing plantations, and was almost tempted to demolish them, rather than another should unjustly reap the fruit of my labours. But I checked myself, and, I am glad I did. We took lodgings in a neighbouring village, and I went round among the gentlemen of the country to see if I could get a little employment. In the mean time the former steward came down to settle accounts with his successor, and was much concerned to find me in such a situation. He was a very able and honest man, and had been engaged by another nobleman to superintend a large improvable estate

in a distant part of the kingdom. He told me, if I would try my fortune, with him once more, he would endeavour to procure me a new settlement. I had nothing to lose, and therefore was willing enough to run any hazard, but I was destitute of means to convey my family to such a distance. My good friend, who was much provoked at the injustice of the new steward, said so much to him, that he brought him to make me an allowance for my garden; and with that I was enabled to make another removal. It was to the place I now inhabit.

When I came here, Sir, all this farm was a naked common, like that you crossed in coming. My lord got an enclosure bill for his part of it, and the steward divided it into different farms, and let it on improving leases to several tenants.

A dreary spot to be sure it looked at first, enough to sink a man's heart to sit down upon it! I had a little unfinished cottage given me to live in, and as I had nothing to stock a farm, I was for some years employed as head labourer and planter about the new enclosures. By very hard working and saving, together with a little help, I was at length enabled to take a small part of the ground I now occupy. I had various discouragement, from bad seasons and other accidents. One year the distemper carried off four out of seven cows that I kept; another year I lost two of my best horses. A high wind once almost entirely destroyed an orchard I had just planted, and blew down my biggest barn. But I was too much used to misfortunes to be easily disheartened, and my way always was to set about repairing them in

the best manner I could, and leave the rest to heaven. This method seems to have answered at last. I have now gone on many years in a course of continued prosperity, adding field to field, increasing my stock, and bringing up a numerous family with credit. My dear wife, who was my faithful partner through so much distress, continues to share my prosperous state; and few couples in the kingdom, I believe, have more cause to be thankful for their lot. This, Sir, is my history. You see it contains nothing very extraordinary; but if it impresses on the mind of this young gentleman the maxim that patience and perseverance will scarcely fail of a good issue in the end, the time you have spent in listening to it will not entirely be lost.

Mr. *Carleton* thanked the good farmer very heartily for the amusement and instruction he had afforded them,

and took leave with many expressions of regard. *Theodore* and he walked home, talking by the way, of what they had heard.

Next morning, Mr. *C.* looking out of the window, saw *Theodore* hard at work in his garden. He was carefully disinterring his buried flowers, trimming and cleaning them, and planting them, anew. He had got the gardener to cut a slip of the broken rose tree, and set it in the middle to give it a chance for growing. By noon every thing was laid smooth and neat, and the bed was well filled. All its splendour, indeed, was gone for the present, but it seemed in a hopeful way to revive again. *Theodore* looked with pleasure over his work; but his father felt more pleasure in witnessing the first fruits of farmer *Hardman's* story.

SEVENTEENTH EVENING.

ON METALS.

PART I.

George and Harry, with their Tutor, one day in their walk were driven by the rain to take shelter in a blacksmith's shed. The shower lasting some time, the boys, in order to amuse themselves, began to examine the things around them. The great bellows first attracted their notice, and they admired the roaring it made, and the expedition with which it raised the fire to a heat too intense for them to look at. They were surprised at the dexterity with which the smith fashioned a bar of iron into a horse-shoe; first beating it, then hammering it well on the anvil,

cutting off a proper length, bending it round, turning up the ends, and lastly, punching the nail-holes. They watched the whole process of fitting it to the horse's foot, and fastening it on; and it had become fair some minutes before they showed a desire to leave the shop and proceed on their walk.

I should never have thought (says *George*, beginning the conversation), that such a hard thing as iron, could have been so easily managed.

Nor I neither (said *Harry*.)

Tut. It was managed, you saw, by the help of fire. The fire made it soft and flexible, so that the smith could easily hammer it, and cut it, and bend it to the shape he wanted; and then dipping it in the water, made it hard again.

G. Are all other metals managed in the same manner.

T. They are all worked by the help

of fire in some way or other, either in melting them, or making them soft.

G. There are a good many sorts of metals, are there not?

T. Yes, several; and if you have a mind, I will tell you about them, and their uses.

G. Pray do, Sir.

H. Yes; I should like to hear it of all things.

T. Well then. First let us consider what a metal is. Do you think you should know one from a stone?

G. A stone!—Yes, I could not mistake a piece of lead or iron for a stone.

T. How would you distinguish it?

G. A metal is bright and shining.

T. True—brilliance is one of their qualities. But glass and crystal are very bright, too.

H. But one may see through glass, and not through a piece of metal.

T. Right. Metals are brilliant, but opake, or not transparent. The thinnest plate of metal that can be made, will keep out the light as effectually as a stone wall.

G. Metals are very heavy too.

T. True. They are the heaviest bodies in nature; for the lightest metal is nearly twice as heavy as the heaviest stone. Well what else?

G. Why, they will bear beating with a hammer, which a stone would not, without flying in pieces.

T. Yes; that property of extending or spreading under the hammer is called *malleability*; and another, like it, is that of bearing to be drawn out into a wire, which is called *ductility*. Metals have both these, and much of their use depends upon them.

G. Metals will melt too.

H. What! will iron melt?

T. Yes; all metals will melt, though

some require greater heat than others. The property of melting is called *fusibility*. Do you know any thing more about them?

G. No; except that they come out of the ground, I believe.

T. That is properly added, for it is this circumstance which makes them rank among *fossils*, or minerals. To sum up their character, then, a metal is a brilliant, opake, heavy, malleable, ductile, and fusible mineral.

G. I think I can hardly remember all that.

T. The *names* may slip your memory, but you cannot see metals at all used, without being sensible of the *things*.

G. But what are *ores?* I remember seeing a heap of iron ore which men were breaking with hammers, and it looked only like stones.

T. The *ore* of a metal is the state in which it is generally met with in the earth, when it is so mixed with stony and other matters, as not to show its proper qualities as a metal.

H. How do people know it then?

T. By experience. It was probably accident that in the early ages discovered that certain fossils by the force of fire might be made to yield a metal. The experiment was repeated on other fossils; so that in length of time all the different metals were found out, and all the different forms in which they lie concealed in the ground. The knowledge of this is called *Mineralogy*, and a very important science it is.

G. Yes, I suppose so; for metals are very valuable things. Our next neighbour, Mr. Sterling, I have heard, gets a great deal of money every year from his mines in Wales.

T. He does. The mineral riches of

some countries are much superior to that of their products above ground, and the revenues of many kings are in great part derived from their mines.

H. I suppose they must be gold and silver mines.

T. Those to be sure are the most valuable, if the metals are found in tolerable abundance. But do you know why they are so?

H. Because money is made of gold and silver.

T. That is a principal reason, no doubt. But these metals have intrinsic properties that make them highly valuable, else probably they would not have been chosen in so many countries to make money of. In the first place, gold and silver are both *perfect metals*, that is, indestructible in the fire. Other metals if kept a considerable time in the fire, change by degrees into a powdery

or scaly matter called a calx. You have melted lead, I dare say.

G. Yes, often.

T. Have you not, then, perceived a drossy film collect upon its surface after it had been kept melting a while?

G. Yes.

T. That is a calx; and in time the whole lead would change to such a substance. You may see, too, when you have heated the poker red-hot, some scales separate from it, which are brittle and drossy.

H. Yes, the kitchen poker is almost burnt away by putting it into the fire.

T. Well—all metals undergo these changes, except gold and silver; but these, if kept ever so long in the hottest fire, sustain no loss or change. They are therefore called *perfect metals.* Gold has several other remarkable properties. It is the heaviest of all metals.

H. What, is it heavier than lead?

T. Yes—about half as heavy again. It is between nineteen and twenty times as heavy as an equal bulk of water. This great weight is a ready means of discovering counterfeit gold coin from genuine; for as gold must be adulterated with something much lighter than itself, a false coin, if of the same weight with the true, will be sensibly bigger. Gold, too, is the most ductile of all metals. You have seen leaf-gold?

G. Yes; I bought a book of it once.

T. Leaf-gold is made by beating a plate of gold placed between pieces of skin, with heavy hammers, till it is spread out to the utmost degree of thinness. And so great is its capacity for being extended, that a single grain, of the metal, which would be scarce bigger than a large pin's head, is

beaten out to a surface of fifty square inches.

G. That is wonderful indeed! but I know leaf-gold must be very thin, for it will almost float upon the air.

T. By drawing gold out to a wire, it may be still further extended. Gold wire, as it is called, is made with silver overlaid with a small proportion of gold, and they are drawn out together. In the wire commonly used for laces, and embroidery, and the like, a grain of gold is made completely to cover a length of three hundred and fifty two feet; and when it is stretched still farther by flatting, it will reach four hundred and one feet.

G. Prodigious! What a vast way a guinea might be drawn out then!

T. Yes, the gold of a guinea at that rate would reach above nine miles and a half. This property in gold of being capable of extension to so extraordinary

a degree is owing to its great tenacity or cohesion of particles, which is such, that you can scarcely break a piece of gold wire by twisting it; and a wire of gold will sustain a greater weight than one of any other metal, equally thick.

H. Then it would make very good wire for hanging bells.

T. It would; but such bell-hanging would come rather too dear. Another valuable quality of gold is its fine colour. You know scarce any thing makes a more splendid appearance than gilding. And a peculiar advantage of it is, that gold is not liable to rust or tarnish as other metals are. It will keep its colour fresh for a great many years in a pure and clear air.

H. I remember the vane of the church steeple was new gilt two years ago, and it looks as well as at first.

T. This property of not rusting would render gold very useful for a

variety of purposes, if it were more common. It would make excellent cooking utensils, water-pipes, mathematical instruments, clock-work, and the like.

G. But is not gold soft? I have seen pieces of gold bent double.

T. Yes; it is next in softness to lead, and, therefore, when it is made into coin, or used for any common purposes, it is mixed with a small proportion of some other metal, in order to harden it. This is called its *alloy*. Our gold coin has one twelfth part of alloy, which is a mixture of silver and copper.

G. How beautiful new gold coin is!

T. Yes—scarce any metal takes a stamp or impression better; and it is capable of a very fine polish.

G. What countries yield the most gold?

T. South America, the East Indies,

and the coast of Africa. Europe affords but little; yet a moderate quantity is got every year from Hungary.

G. I have heard of rivers rolling sands of gold. Is there any truth in that?

T. The poets, as usual, have greatly exaggarated the matter; however, there are various streams in different parts of the world, the sands of which contain particles of gold, and some of them in such quantity as to be worth the search.

H. How does the gold come there?

T. It is washed down along with the soil from mountains by the torrents, which are the sources of rivers. Some persons say that all sands contain gold; but I would not advise you to take the pains to search for it in our common sand: for, in more senses than one, *gold may be bought too dear.*

H. But what a fine thing it would be to find a gold mine on one's estate!

T. Perhaps not so fine as you may imagine, for many a one does not pay the cost of working. A coal pit would probably be a better thing. Who do you think are the greatest gold-finders in Europe?

H. I don't know.

T. The gipsies in Hungary. A number of half-starved, half-naked wretches of that community employ themselves in washing and picking the sands of some mountain-streams in that country which contain gold, from which they obtain just profit enough to keep body and soul together! whereas, had they employed themselves in agriculture or manufactures, they might have got a comfortable subsistence. Gold almost all the world over is first

got by slaves, and it makes slaves of those who possess much of it.

G. For my part, I will be content with a silver mine.

H. But we have none of those in England, have we?

T. We have no silver mines, properly so called, but silver is procured in some of our lead mines. There are, however, pretty rich silver mines in various parts of Europe; but the richest of all are in Peru in South America.

G. Are not the famous mines of Potosi there?

T. They are. Shall I now tell you some of the properties of silver?

G. By all means.

T. It is the other *perfect* metal. It is also as little liable to rust as gold, though indeed it readily gets tarnished.

H. Yes; I know our footman is

often obliged to clean our plate before it is used.

T. Plate, however, is not made of pure silver, any more than silver coin, and silver utensils of all kinds. An alloy is mixed with it, as with gold, to harden it; and that makes it more liable to tarnish.

G. Bright silver, I think, is almost as beautiful as gold.

T. It is the most beautiful of the white metals, and is capable of a very fine polish; and this, together with its rarity, makes it used for a great variety of ornamental purposes. Then it is nearly as ductile and malleable as gold.

G. I have had silver-leaf, and it seemed as thin as gold-leaf.

T. It is nearly so. That is used for silvering, as gold-leaf is for gilding. It is common, too, to cover metals

with a thin coating of silver, which is called plating.

H. The child's saucepan is silvered over on the inside. What is that for?

T. To prevent the victuals from getting any taint from the metal of the saucepan; for silver is not capable of being corroded or dissolved by any of the liquids used for food, as iron and copper are.

H. And that is the reason I suppose that fruit knives are made of silver.

T. It is; but the softness of the metal makes them bear a very poor edge.

G. Does silver melt easily?

T. Silver and gold both melt more difficultly than lead; not till they are above a common red hot. As to the weight of silver, it is nearly one half

less than that of gold, being only eleven times as heavy as water.

H. Is quicksilver a kind of silver?

T. It takes its name from silver, being very like it in colour; but in reality it is a very different thing, and one of the most singular of the metal kind.

G. It is not *malleable*, I am sure.

T. No; when it is quick or fluid, as it always is in our climate. But a very great degree of cold makes it solid, and then it is malleable like other metals.

G. I have heard of killing quicksilver; pray what does that mean?

T. It means destroying its property of running about, by mixing it with somewhat else. Thus if quicksilver be well rubbed with fat, or oil, or gum, it unites with them, losing all its metallic appearance or fluidity.

It also unites readily with gold and silver, and several other metals, into the form of a kind of shining paste, which is called an *amalgam*. This is one of the ways of gilding or silvering a thing. Your buttons are gilt by means of an amalgam.

G. How is that done?

T. The shells of the buttons, which are made of copper, are shaken in a hat with a lump of amalgam of gold and quicksilver, till they are all covered over with it. They are then put into a sort of frying-pan, and held over the fire. The quicksilver being very volatile in its nature, flies off in the form of a smoke or vapour when it is heated, leaving the gold behind it spread over the surface of the button. Thus many dozens are gilt at once with the greatest ease.

H. What a clever way! I should like vastly to see it done.

T. You may see it any day at Bir-

mingham, if you happen to be there; as well as a great many other curious operations on metals.

G. What a weight quicksilver is! I remember taking up a bottle full of it, and I had liked to have dropped it again, it was so much heavier than I expected.

T. Yes, it is one of the heaviest of the metals—about fifteen times as heavy as water.

G. Is not *mercury* a name for quicksilver? I have heard them talk of the mercury rising and falling in the weather glass.

T. It is. You, perhaps, may have heard too of *mercurial medicines*, which are those made of quicksilver prepared in one manner or another.

G. What are they good for?

T. For a great variety of complaints. Your brother took some lately for the worms; and they are often given for breakings out on the skin, and for sores

and swellings. But they have one remarkable effect when taken in a considerable quantity, which is to loosen the teeth, and cause a great spitting. This is called salivation.

H. I used to think quicksilver was poison.

T. When it is in its common state of running quicksilver, it generally does neither good nor harm: but it may be prepared, so as to be a very violent medicine, or even a poison.

G. Is it useful for any thing else?

T. Yes—for a variety of purposes in the arts, which I cannot now very well explain to you. But you will perhaps be surprised to hear that one of the finest red paints is made from quicksilver.

G. A red paint!—which is that?

T. Vermilion, or cinnabar, which is a particular mixture of sulphur with quicksilver.

H. Is quicksilver found in this country?

T. No. The greatest quantity comes from Spain, Istria, and South America. It is a considerable object of commerce, and bears a high value, though much inferior to silver.—Well—so much for metals at present. We will talk of the rest on some future opportunity.

THE PRICE OF A VICTORY.

Good news! great news! glorious news! cried young *Oswald*, as he entered his father's house. We have got a complete victory, and have killed I don't know how many thousands of the enemy; and we are to have bonfires and illuminations!

And so, said his father, you think that killing a great many thousands of human creatures is a thing to be very glad about.

Os. No—I do not quite think so, neither; but surely it is right to be glad that our country has gained a great advantage.

F. No doubt, it is right to wish well to our country, as far as its prosperity can be promoted without injuring the rest of mankind. But wars are very seldom to the real advantage of any nation; and when they are ever so useful or necessary, so many dreadful evils attend them, that a humane man will scarcely rejoice in them, if he considers at all on the subject.

Os. But if our enemies would do us a great deal of mischief, and we prevent it by beating them, have we not a right to be glad of it?

F. Alas! we are in general little judges which of the parties has the most mischievous intentions. Commonly they are both in the wrong, and success will make both of them unjust and un-

reasonable. But putting this out of the question, he who rejoices in the event of a battle, rejoices in the misery of many thousands of his species; and the thought of that should make him pause a little. Suppose a surgeon were to come with a smiling countenance, and tell us triumphantly that he had cut off half a dozen legs to day—what would you think of him?

Os. I should think him very hard-hearted.

F. And yet those operations are done for the benefit of the sufferers, and by their own desire. But in a battle, the probability is, that none of those engaged on either side have any interest at all in the cause they are fighting for, and most of them come there because they cannot help it. In this battle that you are so rejoiced about, there have been ten thousand men killed upon the spot, and nearly as many wounded.

Os. On both sides?

F. Yes—but they are *men* on both sides. Consider now that the ten thousand sent out of the world in this morning's work, though they are past feeling themselves, have left probably two persons each, on an average, to lament their loss, either parents, wives, or children. Here are then twenty thousand people made unhappy at one stroke on their account. This, however, is hardly so dreadful to think of as the condition of the wounded. At the moment we are talking, eight or ten thousand more are lying in agony, torn with shot or gashed with cuts, their wounds all festering, some hourly to die a most excruciating death, others to linger in torture weeks and months, and many doomed to drag on a miserable existence for the rest of their lives, with diseased and mutilated bodies.

Os. This is shocking to think of, indeed!

F. When you light your candles, then, this evening, *think what they cost.*

Os. But every body else is glad, and seems to think nothing of these things.

F. True—they do *not* think of them. If they did, I cannot suppose they would be so void of feeling as to enjoy themselves in merriment, when so many of their fellow-creatures are made miserable. Do you not remember when poor *Dickens* had his leg broken to pieces by a loaded waggon, how all the town pitied him?

Os. Yes, very well. I could not sleep the night after for thinking of him.

F. But here are thousands suffering as much as he, and we scarce bestow a single thought on them. If any one of these poor creatures were before our eyes, we should probably feel much more than we do now, for them all

together. Shall I tell you a story of a soldier's fortune, that came to my own knowledge?

Os. Yes—pray do.

F. In the village where I went to school, there was an honest industrious weaver and his wife, who had an only son, named *Walter*, just come to man's estate. *Walter* was a good and dutiful lad, and a clever workman, so that he was a great help to his parents. One unlucky day, having gone to the next market town with some work, he met with a companion, who took him to the ale-house and treated him. As he was coming away, a recruiting serjeant entered the room, who seeing *Walter* to be a likely young fellow, had a great mind to entrap him. He persuaded him to sit down again and take a glass with him; and kept him in talk with fine stories about a soldier's life, till *Walter* got fuddled before he was aware. The

serjeant then clapped a shilling into his hand to drink his majesty's health, and told him he was enlisted. He was kept there all night, and next morning was taken before a magistrate to be sworn in. *Walter* had now become sober, and was very sorry for what he had done; but he was told that he could not get off without paying a guinea smart money. This he knew not how to raise; and being likewise afraid and ashamed to face his friends, he took the oath and bounty money, and marched away with the serjeant, without ever returning home. His poor father and mother when they heard of the affair, were almost heart-broken; and a young woman in the village, who was his sweetheart, had like to have gone distracted. *Walter* sent them a line from the first stage, to bid them farewell, and comfort them. H joined his regiment, which soon embarked for Ger-

many, where it continued till the peace. *Walter*, once or twice sent word home of his welfare, but for the last year nothing was heard of him.

Os. Where was he then?

F. You shall hear. One summer's evening, a man in an old red coat, hobbling on crutches, was seen to enter the village. His countenance was pale and sickly, his cheeks hollow, and his whole appearance bespoke extreme wretchedness. Several people gathered round him, looking earnestly in his face. Among these, a young woman, having gazed at him a while, cried out, My *Walter!* and fainted away. *Walter* fell on the ground beside her. His father and mother being fetched by some of the spectators, came and took him in their arms, weeping bitterly. I saw the whole scene, and shall never forget it. At length the neighbours helped them into the house

where *Walter* told them the following story.

"At the last great battle that our troops gained in Germany, I was among the first engaged, and received a shot that broke my thigh. I fell, and presently after our regiment was forced to retreat. A squadron of the enemy's horse came galloping down upon us. A trooper making a blow at me with his sabre as I lay, I lifted up my arm to save my head, and got a cut which divided all the sinews at the back of my wrist. Soon after, the enemy were driven back, and came across us again. A horse set his foot on my side, and broke three of my ribs. The action was long and bloody, and the wounded on both sides were left on the field all night. A dreadful night it was to me, you may think! I had fainted through loss of blood, and when I recovered, I was tormented with thirst, and the

cold air made my wounds smart intolerably. About noon next day, waggons came to carry away those who remained alive; and I, with a number of others, was put into one to be conveyed to the next town. The motion of the carriage was terrible for my broken bones—every jolt went to my heart. We were taken to an hospital, which was crammed as full as it could hold; and we should all have been suffocated with the heat and stench, had not a fever broke out, which soon thinned our numbers. I took it, and was twice given over; however, I struggled through. But my wounds proved so difficult to heal, that it was almost a twelvemonth before I could be discharged. A great deal of the bone in my thigh came away in splinters, and left the limb crooked and useless as you see. I entirely lost the use of three fingers of my right-hand; and

my broken ribs made me spit blood a long time, and have left a cough and difficulty of breathing, which I believe will bring me to my grave. I was sent home and discharged from the army, and I have begged my way hither as well as I could. I am told that the peace has left the affairs of my country just as they were before; but who will restore me my health and limbs? I am put on the list for a Chelsea pensioner, which will support me, if I live to receive it, without being a burden to my friends. That is all that remains for *Walter* now."

Os. Poor *Walter!* What became of him afterwards?

F. The wound of his thigh broke out afresh, and discharged more splinters after a great deal of pain and fever. As winter came on, his cough increased. He wasted to a skeleton, and died the next spring. The young

woman, his sweetheart, sat up with him every night to the last; and soon after his death she fell into a consumption; and followed him. The old people, deprived of the stay and comfort of their age, fell into despair and poverty, and were taken into the workhouse, where they ended their days.

This was the history of *Walter the soldier*. It has been that of thousands more; and will be that of many a poor fellow, over whose fate you are now rejoicing. Such is the *price of a victory*.

EIGHTTEENTH EVENING.

GOOD COMPANY.

Be sure, *Frederick*, always keep *good company*, was the final admonition of Mr. *Lofty*, on dismissing his son to the University.

I entreat you, *Henry*, always to

choose *good company,* said Mr. *Manly,* on parting with his son to an apprenticeship in a neighbouring town.

But it is impossible for two people to mean more differently by the same words.

In Mr. *Lofty's* idea, good company was that of persons superior to ourselves in rank and fortune. By this alone he estimated it; and the degrees of comparison, better and best, were made exactly to correspond to such a scale. Thus, if an esquire was *good* company, a baronet was *better*, and a lord *best of all*, provided that he was not a *poor* lord, for in that case, a rich gentleman might be at least as good. For as, according to Mr. *Lofty's* maxim, the great purpose for which companions were to be chosen was to advance a young man in the world by their credit and interest; those were to be preferred, who afforded the best prospects in this respect.

Mr. *Manly*, on the other hand, understood by *good* company, that which was improving to the morals and understanding; and by the *best*, that which, to a high degree of these qualities, added true politeness of manners. As superior advantages in education to a certain point accompany superiority of condition, he wished his son to prefer as companions those whose situation in life had afforded them the opportunity of being well educated; but he was far from desiring him to shun connexions with worth and talents, wherever he should find them.

Mr. *Lofty* had an utter aversion to *low company*, by which he meant inferiors, people of no fashion and figure, shabby fellows, whom nobody knows.

Mr. *Manly*, equally disliked *low company*, understanding by it persons of mean habits and vulgar conversation.

A great part of Mr. *Manly's* good

company, was Mr. *Lofty's* low company; and not a few of Mr. *Lofty's* very best company, were Mr. *Manly's* very worst.

Each of the sons understood his father's meaning, and followed his advice.

Frederick, from the time of his entrance at the University, commenced what is called a *Tuft-hunter*, from the tuft in the cap worn by young noblemen. He took pains to insinuate himself into the good graces of all the young men of high fashion in his college, and became a constant companion in their schemes of frolic and dissipation. They treated him with an insolent familiarity, often bordering upon contempt; but following another maxim of his father's, "one must stoop to rise," he took it all in good part. He totally neglected study, as unnecessary, and indeed inconsistent with his plan. He spent a great deal of money, with which

his father, finding that he went in *good company*, at first supplied him freely. In time, however, his expenses amounted to so much, that Mr. *Lofty*, who kept good company too, found it difficult to answer his demands. A considerable sum that he lost at play with one of his noble friends, increased the difficulty. If it were not paid, the disgrace of not having discharged a *debt of honour* would lose him all the favour he had acquired; yet the money could not be raised without greatly embarrassing his father's affairs.

In the midst of this perplexity, Mr. *Lofty* died, leaving behind him a large family, and very little property. *Frederick* came up to town, and soon dissipated in *good company* the scanty portion that came to his share. Having neither industry, knowledge, nor reputation, he was then obliged to become an humble dependant on the great, flattering all

their follies, and ministering to their vices, treated by them with mortifying neglect, and equally despised and detested by the rest of the world.

Henry, in the mean time, entered with spirit into the business of his new profession, and employed his leisure in cultivating an acquaintance with a few select friends. These were partly young men in a situation similar to his own, partly persons already settled in life, but all distinguished by propriety of conduct, and improved understandings. From all of them he learned somewhat valuable, but he was more particularly indebted to two of them, who were in a station of life inferior to that of the rest. One was a watchmaker, an excellent mechanic and tolerable mathematician, and well acquainted with the construction and use of all the instruments employed in experimental philosophy. The other was

a young druggist, who had a good knowledge of chemistry, and frequently employed himself in chemical operations and experiments. Both of them were men of very decent manners, and took a pleasure in communicating their knowledge to such as showed a taste for similar studies. *Henry* frequently visited them, and derived much useful information from their instructions, for which he ever expressed great thankfulness. These various occupations and good examples effectually preserved him from the errors of youth, and he passed his time with credit and satisfaction. He had the same misfortune with *Frederick*, just as he was ready to come out into the world, of losing his father, upon whom the support of the family chiefly depended; but in the character he had established, and the knowledge he had acquired, he found an effectual re-

source. One of his young friends proposed to him a partnership in a manufacture he had just set up at considerable expense, requiring for his share only the exertion of his talents and industry. *Henry* accepted the offer, and made such good use of the skill in mechanics and chemistry he had acquired, that he introduced many improvements into the manufactory, and rendered it a very profitable concern. He lived prosperous and independent, and retained in manhood all the friendships of his youth.

THE DOG BALKED OF HIS DINNER.

A TALE.

THINK yourself sure of nothing till you've got it:
This is the lesson of the day.
In metaphoric language I might say,
Count not your bird before you've shot it.

Quoth proverb, "'Twixt the cup and lip
There's many a slip."
Not every guest invited sits at table,
So says *my* fable.

A man once gave a dinner to his friend;
His friend!—his patron I should rather think,
By all the loads of meat and drink,
And fruits and jellies without end,
Sent home the morning of the feast.
Jowler, his dog, a social beast,
Soon as he smelt the matter out; away
Scampers to old acquaintance *Tray*,
And with expressions kind and hearty
Invites him to the party.

Tray wanted little pressing to a dinner;
He was, in truth, a gormandizing sinner.
He lick'd his chaps and wagg'd his tail;
Dear friend! (he cried) I will not fail:
But what's your hour;
We dine at four;
But if you come an hour too soon,
You'll find there's something to be done.

His friend withdrawn, *Tray*, full of glee,
As blithe as blithe could be,

Skipp'd, danc'd, and play'd full many an antic,
Like one half frantic,
Then sober in the sun lay winking,
But could not sleep for thinking.
He thought o'er every dainty dish,
Fried, boiled, and roast,
Flesh, fowl, and fish,
With tripes and toast,
Fit for a dog to eat;
And in his fancy made a treat,
Might grace a bill of fare
For my Lord May'r.

At length, just on the stroke of three,
Forth sallied he;
And through a well-known hole
He slily stole
Pop on the scene of action.
Here he beheld, with wondrous satisfaction,
All hands employed in drawing, stuffing,
Skewering, spitting, and basting,
The red-faced cook sweating and puffing,
Chopping, mixing and tasting.
Tray skulk'd about, now here, now there,
Peep'd into this, and smelt at that,
And lick'd the gravy and the fat,
And cried, O rare! how I shall fare!

But Fortune, spiteful as Old Nick,
Resolv'd to play our dog a trick;
She made the cook
Just cast a look
Where *Tray*, beneath the dresser lying,
His promis'd bliss was eyeing.

A cook while cooking is a sort of Fury:
A maxim worth rememb'ring, I assure ye.
Tray found it true,
And so may you,
If e'er you choose to try.
How now! (quoth she) what's this I spy:
A nasty cur! who let him in?
Would he were hang'd with all his kin!
A pretty kitchen guest indeed!
But I shall pack him off with speed.

So saying, on poor *Tray* she flew,
And dragg'd the culprit forth to view;
Then to his terror and amazement,
Whirl'd him like lightning through the casement!

THE UMBELLIFEROUS PLANTS.

Tutor—George—Harry.

H. WHAT plant is that man gathering under the hedge?

G. I don't know; but the boys call the stalks kexes, and blow through them.

H. I have seen them; but I want to know the plant.

G. Will you please to tell us, Sir, what it is?

T. It is hemlock.

G. Hemlock is poison, is it not?

T. Yes, in some degree: and it is also a medicine; that man is gathering it for the apothecaries.

H. I should like to know it.

T. Well then—go and bring one.

[Harry *fetches it.*

G. I think I have seen a great many of this sort.

T. Perhaps you may; but there are many other kinds of plants extremely like it. It is one of a large family called the *umbelliferous*, which contains both food, physic, and poison. It will be worth while for you to know something about them, so let us examine this hemlock closely. You see this tall hollow stalk, which divides into several branches from each of which spring spokes or *rundles*, as they are called, of flower-stalks. You see they are like rays from a circle, or the spokes of a wheel.

H. Or like the sticks of an umbrella.

T. True; and they are called *umbels*, which has the same derivation.—If you pursue one of these rundles or umbels, you will find that each stick or spoke terminates in another set of smaller stalks, each of which bears a single small flower.

G. They are small ones indeed.

T. But if you look sharply, I dare say your eyes are good enough to distinguish that they are divided into five leaves, and furnished with five chives and two pistils in the middle.

H. I can see them.

G. And so can I.

T. The pistils are succeeded by a sort of fruit, which is a twin seed joined in the middle, as you may see in this rundle that is past flowering. Here I divide one of them into two.

G. Would each of these grow?

T. Yes. Well—this is the structure of the flowering part of the umbelliferous tribe. Now for the leaf. Pluck one.

H. Is this one leaf, or many?

T. It is properly one, but it is cut and divided into many portions. From this mid-rib spring smaller leaves set opposite each other; and from the rib of each of these, proceed others,

which themselves are also divided. These are called doubly or trebly pinnated leaves; and most of the umbelliferous plants, but not all, have leaves of this kind.

H. It is like a parsley leaf.

T. True—and parsley is one of the same tribe, and hemlock and others are sometimes mistaken for it.

G. How curiously the stalk of this hemlock is spotted!

T. Yes. That is one of the marks by which it is known. It is also distinguished by its peculiar smell, and by other circumstances which you can only understand when you have compared a number of the tribe. I will now tell you about some others, the names of which you are probably acquainted with. In the first place, there are carrots and parsnips.

H. Carrots and parsnips!—they are not poisons, I am sure.

G. I remember, now, that carrots have such a leaf as this.

T. They have. It is the *roots* of these, you know, that are eaten. But we eat the *leaves* of parsley and fennel, which are of the same class. Celery is another, the *stalks* of which are chiefly used, made white by trenching up the earth about them. The stalks of angelica are used differently.

H. I know how—candied.

T. Yes.—Then there are many of which the *seeds* are used. There is carraway.

H. What, the seeds that are put into cakes and comfits?

T. Yes. They are warm and pungent to the taste; and so are the seeds of many others of the umbelliferous plants, as coriander, fennel, wild carrot, angelica, anise, cummin, and dill. All these are employed in food or medicine, and are good in warming or strei gthening the tomach.

G. Those are pleasant medicines enough.

T. They are; but you will not say the same of some others of the class, which are noted medicines too; such as the plant yielding asafetida, and several more, from which what are called the fetid gums are produced.

G. Asafetida!—that's nasty stuff, I know, does it grow here?

T. No; and most of the sweet seeds I before mentioned come from abroad too. Now I will tell you of some of the poisons.

H. Hemlock is one that we know already.

T. Yes. Then there is another kind that grows in the water, and is more poisonous, called Water-Hemlock. Another is a large plant growing in ditches, with leaves extremely like celery, called Hemlock-Dropwort. Another, common in drier situations,

and distinguished by leaves less divided than most of the class, is Cow-Parsnip or Madnep. Of some of these the leaves, of others the roots, are most poisonous. Their effects are to make the head giddy, bring on stupidity or delirium, and cause violent sickness. The Athenians used to put criminals to death by making them drink the juice of a kind of hemlock growing in that country, as you may read in the life of that excellent philosopher Socrates, who was killed in that manner.

H. What was he killed for?

T. Because he was wiser and better than his fellow-citizens. Among us it is only by accident that mischief is done by these plants. I remember a melancholy instance of a poor boy, who in rambling about the fields with his little brothers and sisters, chanced to meet with a root of Hemlock-Drop-

wort. It looked so white and nice, that he was tempted to eat a good deal of it. The other children also ate some, but not so much. When they got home they were all taken very ill. The eldest boy, who had eaten most, died in great agony. The others recovered, after suffering a great deal.

G. Is there any way of preventing their bad effects?

T. The best way is to clear the stomach as soon as possible by a strong vomit and large draughts of warm water. After that, vinegar is useful in removing the disorder of the head.

H. But are the roots sweet and pleasant, that people should be tempted to eat them?

T. Several of them are. There is a small plant of the tribe, the root of which is much sought after by boys,

who dig for it with their knives. It is round and called earth-nut, or pig-nut.

G. But that's not poison, I suppose?

T. No; but it is not very wholesome. I believe, however, that the roots of the most poisonous become innocent by boiling. I have heard that boiled hemlock roots are as good as carrots.

G. I think I should not like to eat them, however. But pray why should there be any poisons at all?

T. What we call poisons are only hurtful to particular animals. They are the proper food of others, and no doubt do more good than hurt in the creation. Most of the things that are poisonous to us in large quantities, are useful medicines in small ones; and we have reason bestowed upon *us*, to guard us against mischief. Other animals in

general refuse by instinct what would prove hurtful to them. You see beneath yonder hedge a great crop of tall flourishing plants with white flowers. They are of the umbelliferous family, and are called Wild Cicely or Cow-weed. The latter name is given them, because the cows will not touch them, though the pasture be ever so bare.

H. Would they poison them?

T. Perhaps they would; at least they are not proper food for them. We will go and examine them, and I will show you how they differ from hemlock, for which they are sometimes mistaken.

G. I should like to get some of these plants, and dry them.

T. You shall, and write down the names of them all, and learn to know the innocent from the hurtful.

G. That will be very useful.

T. It will. Remember now the general character of the umbelliferous class. The flower stalks are divided into spokes or umbels, which are again divided into others, each of them terminated by a small five-leaved flower, having five chives and two pistils, succeeded by a twin seed. Their leaves are generally finely divided. You will soon know them, after having examined two or three of the tribe. Remember too, that they are a *suspicious race*, and not to be made free with till you are well acquainted with them.

THE KID.

One bleak day in March, *Sylvia* returning from a visit to the sheep-fold, met with a young kidling deserted by its dam on the naked heath. It was bleating piteously, and was so benumbed with the cold, that it could scarcely

stand. *Sylvia* took it up in her arms, and pressed it close to her bosom. She hastened home, and showing her little foundling to her parents, begged she might rear it for her own. They consented; and *Sylvia* immediately got a basket full of clean straw, and made a bed for him on the hearth. She warmed some milk, and held it to him in a platter. The poor creature drank it up eagerly, and then licked her hand for more. *Sylvia* was delighted. She chafed his tender legs with her warm hands, and soon saw him jump out of his basket, and frisk across the room. When full, he lay down again, and took a comfortable nap.

The next day the kid had a name bestowed upon him. As he gave tokens of being an excellent jumper, it was *Capriole*. He was introduced to all the rest of the family, and the younger children were allowed to stroke and pat

him; but *Sylvia* would let nobody be intimate with him but herself. The great mastiff was charged never to hurt him, and indeed he had no intention to do it.

Within a few days, *Capriole* followed *Sylvia* all about the house; trotted by her side into the yard; ran races with her in the home-field; fed out of her hand, and was declared pet and favourite. As the spring advanced, *Sylvia* roamed in the fields and gathered wild flowers, with which she wove garlands and hung them round the kid's neck. He could not be kept, however, from munching his finery, when he could reach it with his mouth. He was likewise rather troublesome in thrusting his nose into the meal tub and flour box, and following people into the dairy, and sipping the milk that was set for cream. He now and then got a blow for his intrusion; but his mistress always took

his part, and indulged him in every liberty.

Capriole's horns now began to bud, and a little white beard sprouted at the end of his chin. He grew bold enough to put himself into a fighting posture whenever he was offended. He butted down little *Colin* into the dirt; quarrelled with the geese for their allowance of corn; and held many a stout battle with the old turkey-cock. Every body said *Capriole* is growing too saucy, he must be sent away or taught better manners. But *Sylvia* still stood his friend, and he repaid her love with many tender caresses.

The farm-house, where *Sylvia* lived, was situated in a sweet valley, by the side of a clear stream, bordered with trees. Above the house rose a sloping meadow, and beyond that was an open common covered with purple heath and yellow furze. Further on, at some

distance rose a steep hill, the summit of which was a bare craggy rock, scarcely accessible to human feet. *Capriole* ranging at his pleasure, often got upon the common, and was pleased with browsing the short grass and wild herbs which grew there. Still, however, when his mistress came to see him, he would run bounding at her call, and accompany her back to the farm.

One fine summer's day, *Sylvia*, after having finished the business of the morning, wanted to play with her kid: and missing him, she went to the side of the common, and called aloud *Capriole! Capriole!* expecting to see him come running to her as usual. No *Capriole!* came. She went on and on, still calling her kid with the most endearing accents, but nothing was to be seen of him. Her heart began to flutter. What can be come of him? Surely somebody must have stolen him,—or perhaps the

neighbour's dogs have worried him. Oh my poor *Capriole!* my dear *Capriole!* I shall never see you again!— and *Sylvia* began to weep.

She still went on, looking wistfully all around, and making the place echo with *Capriole, Capriole!* where are you, my *Capriole?* till at length she came to the foot of the steep hill. She climbed up its sides to get a better view. No kid was to be seen. She sat down and wept, and wrung her hands. After a while, she fancied she heard a bleating like the well-known voice of her *Capriole.* She started up, and looked toward the sound, which seemed a great way over head. At length she spied, just on the edge of a steep crag, her *Capriole* peeping over. She stretched out her hands to him, and began to call, but with a timid voice, lest in his impatience to return to her, he should leap down and break his neck. But

there was no such danger. *Capriole* was inhaling the fresh breeze of the mountains, and enjoying with rapture the scenes for which nature designed him. His bleating was the expression of joy, and he bestowed not a thought on his kind mistress, nor paid the least attention to her call. *Sylvia* ascended as high as she could towards him, and called louder and louder, but all in vain. *Capriole* leaped from rock to rock, cropped the fine herbage in the clefts, and was quite lost in the pleasure of his new existence.

Poor *Sylvia* staid till she was tired, and then returned disconsolate to the farm, to relate her misfortune. She got her brothers to accompany her back to the hill, and took with her a slice of white bread and some milk to tempt the little wanderer home. But he had mounted still higher, and had joined a herd of companions of the same species, with whom he was frisking and sport-

ing. He had neither eyes nor ears for his old friends of the valley. All former habits were broken at once, and he had commenced free commoner of nature. *Sylvia* came back, crying as much from vexation as sorrow. The little ungrateful thing! (said she)—so well as I loved him, and so kindly as I treated him, to desert me in this way at last!—But he was always a rover.

Take care then, *Sylvia*, (said her mother) how you set your heart upon *rovers* again!

HOW TO MAKE THE BEST OF IT.

Robinet, a peasant of Lorrain, after a hard day's work at the next market-town, was running home with a basket in his hand. What a delicious supper shall I have! (said he to himself.) This piece of kid, well stewed down,

with my onions sliced, thickened with my meal, and seasoned with my salt and pepper, will make a dish for the bishop of the diocese. Then I have a good piece of barley loaf at home to finish with. How I long to be at it!

A noise in the hedge now attracted his notice, and he spied a squirrel nimbly running up a tree, and popping into a hole between the branches. Ha! (thought he) what a nice present a nest of young squirrels will be to my little master! I'll try if I can get it. Upon this, he set down his basket in the road, and began to climb up the tree. He had half ascended, when casting a look at his basket, he saw a dog with his nose in it, ferreting out the piece of kid's flesh. He made all possible speed down, but the dog was too quick for him, and ran off with the meat in his mouth. *Robinet* looked after him—Well, (said he) then I must

be contented with soup-meagre—and no bad thing neither.

He travelled on, and came to a little public house by the road side, where an acquaintance of his was sitting on a bench drinking. He invited *Robinet* to take a draught. *Robinet* seated himself by his friend, and set his basket on the bench close by him. A tame raven, which was kept at the house, came slyly behind him, and perching on the basket, stole away the bag in which the meal was tied up, and hopped off with it to his hole. *Robinet* did not perceive the theft till he had got on his way again. He returned to search for his bag, but could hear no tidings of it. Well (says he), my soup will be the thinner, but I will boil a slice of bread with it, and that will do it some good at least.

He went on again, and arrived at a little brook over which was laid a nar-

row plank. A young woman coming up to pass at the same time, *Robinet* gallantly offered his hand. As soon as she was got to the middle, either through fear or sport, she shrieked out, and cried she was falling. *Robinet* hastening to support her with his other hand, let his basket drop into the stream. As soon as she was safe over, he jumped in and recovered it, but when he took it out he perceived that all the salt was melted, and the pepper washed away. Nothing was now left but the onions. Well! (says *Robinet*) then I must sup to-night upon roasted onions and barley bread. Last night I had the bread alone. To-morrow morning it will not signify what I had. So saying he trudged on, singing as before.

NINETEENTH EVENING.

EYES, AND NO EYES;

OR,

THE ART OF SEEING.

WELL, *Robert*, where have you been walking this afternoon? (said Mr. *Andrews* to one of his pupils at the close of a holiday.)

R. I have been, Sir, to Broom-heath, and so round by the windmill upon Camp-mount, and home through the meadows by the river-side.

Mr. *A.* Well, that's a pleasant round.

R. I thought it very dull, Sir; I scarcely met with a single person. I

had rather by half have gone along the turnpike road.

Mr. *A.* Why, if seeing men and horses is your object, you would indeed be better entertained on the high-road. But did you see *William?*

R. We set out together, but he lagged behind in the lane, so I walked on and left him.

Mr. *A.* That was a pity. He would have been company for you.

R. O, he is so tedious, always stopping to look at this thing and that! I had rather walk alone. I dare say he is not got home yet.

Mr. *A.* Here he comes. Well, *William,* where have you been?

W. O, Sir, the pleasantest walk! I went all over Broom-heath, and so up to the mill at the top of the hill, and then down among the green meadows by the side of the river.

Mr. *A.* Why, that is just the round

Robert has been taking; and he complains of its dulness, and prefers the high road.

W. I wonder at that. I am sure I hardly took a step that did not delight me, and I have brought my handkerchief full of curiosities home.

Mr. *A.* Suppose, then, you give us some account of what amused you so much. I fancy it will be as new to *Robert* as to me.

W. I will, Sir. The lane leading to the heath, you know, is close and sandy, so I did not mind it much, but made the best of my way. However, I spied a curious thing enough in the hedge. It was an old crab-tree, out of which grew a great bunch of something green, quite different from the tree itself. Here is a branch of it.

Mr. *A.* Ah! this is Misseltoe, a plant of great fame for the use made of it by the Druids of old in their re-

ligious rites and incantations. It bears a very slimy white berry, of which bird-lime may be made, whence its Latin name of *Viscus*. It is one of those plants which do not grow in the ground by a root of their own, but fix themselves upon other plants; whence they have been humorously styled *parasitical*, as being hangers-on, or dependents. It was the misseltoe of the oak that the Druids particularly honoured.

W. A little farther on I saw a green woodpecker fly to a tree, and run up the trunk like a cat.

Mr. *A*. That was to seek for insects in the bark, on which they live. They bore holes with their strong bills for that purpose, and do much damage to the trees by it.

W. What beautiful birds they are.

Mr. *A*. Yes; they have been called, from their colour and size, the English parrot.

W. When I got upon the open heath, how charming it was! The air seemed so fresh, and the prospect on every side so free and unbounded! Then it was all covered with gay flowers, many of which I had never observed before. There were at least three kinds of heath (I have got them in my handkerchief here), and gorse, and bloom, and bell-flower, and many others of all colours, that I will beg you presently to tell me the names of.

Mr. *A.* That I will readily.

W. I saw too, several birds that were new to me. There was a pretty grayish one, of the size of a lark, that was hopping about some great stones; and when he flew he shewed a great deal of white above his tail.

Mr. *A.* That was a wheat-ear. They are reckoned very delicious birds to eat, and frequent the open downs in

Sussex, and some other counties, in great numbers.

W. There was a flock of lapwings upon a marshy part of the heath, that amused me much. As I came near them, some of them kept flying round and round just over my head, and crying *pewit* so distinctly one might almost fancy they spoke. I thought I should have caught one of them, for he flew as if one of his wings was broken, and often tumbled close to the ground; but as I came near, he always made a shift to get away.

Mr. *A.* Ha, ha! you were finely taken in then! This was all an artifice of the bird's to entice you away from its nest; for they build upon the bare ground, and their nests would easily be observed, did they not draw off the attention of intruders by their loud cries and counterfeit lameness.

W. I wish I had known that, for he led me a long chase often over shoes in water. However, it was the cause of my falling in with an old man and a boy who were cutting and piling up turf for fuel, and I had a good deal of talk with them about the manner of preparing the turf, and the price it sells at. They gave me too, a creature I never saw before—a young viper, which they had just killed, together with its dam. I have seen several common snakes, but this is thicker in proportion, and of a darker colour than they are.

Mr. *A.* True. Vipers frequent those turfy boggy grounds pretty much, and I have known several turf-cutters bitten by them.

W. They are very venomous are they not?

Mr. *A.* Enough so to make their wounds painful and dangerous, though they seldom prove fatal.

W. Well—I then took my course up to the windmill on the mount. I climbed up the steps of the mill in order to get a better view of the country round. What an extensive prospect! I counted fifteen church-steeples; and I saw several gentlemen's houses peeping out from the midst of green woods and plantations; and I could trace the windings of the river all along the low grounds, till it was lost behind a ridge of hills. But I'll tell you what I mean to do, Sir, if you will give me leave.

Mr. *A.* What is that?

W. I will go again, and take with me Carey's county-map, by which I shall probably be able to make out most of the places.

Mr. *A.* You shall have it, and I will go with you and take my pocket spying glass.

W. I shall be very glad of that. Well—a thought struck me, that as

the hill is called *Camp-mount*, there might probably be some remains of ditches and mounds with which I have read that camps were surrounded. And I really believe I discovered something of that sort running round one side of the mount.

Mr. *A.* Very likely you might. I know antiquaries have described such remains as existing there, which some suppose to be Roman, others Danish; we will examine them further, when we go.

W. From the hill I went straight down to the meadows below, and walked on the side of a brook that runs into the river. It was all bordered with reeds and flags and tall flowering plants quite different from those I had seen on the heath. As I was getting down the bank to reach one of them, I heard something plunge into the water near me. It was a large water rat, and I saw

it swim over to the other side, and go into its hole. There were a great many large dragon flies all about the stream; I caught one of the finest, and have got him here in a leaf. But how I longed to catch a bird that I saw hovering over the water, and every now and then darted down into it! It was all over a mixture of the most beautiful green and blue, with some orange-colour. It was somewhat less than a thrush, and had a large head and bill, and a short tail.

Mr. *A.* I can tell you what that bird was—a kingfisher, the celebrated halcyon of the ancients, about which so many tales are told. It lives on fish, which it catches in the manner you saw. It builds in holes in the banks, and is a shy retired bird, never to be seen far from the stream where it inhabits.

W. I must try to get another sight of him, for I never saw a bird that pleased

me so much. Well—I followed this little brook till it entered the river, and then took the path that runs along the bank. On the opposite side I observed several little birds running along the shore, and making a piping noise. They were brown and white, and about as big as a snipe.

Mr. *A.* I suppose they were sandpipers, one of the numerous family of birds that get their living by wading among the shallows, and picking up worms and insects.

W. There were a great many swallows, too, sporting upon the surface of the water, that entertained me with their motions. Sometimes they dashed into the stream; sometimes they pursued one another so quick, that the eye could scarcely follow them. In one place, where a high steep sandbank rose directly above the river, I observed many of them go in and out

of holes with which the bank was bored full.

Mr. *A.* Those were sand-martins, the smallest of our species of swallows. They are of a mouse-colour above, and white beneath. They make their nests and bring up their young in these holes, which run a great depth, and by their situation are secure from all plunderers.

W. A little further I saw a man in a boat who was catching eels in an odd way. He had a long pole with broad iron prongs at the end, just like Neptune's trident, only there were five instead of three. This he pushed straight down among the mud in the deepest parts of the river, and fetched up the eels sticking between the prongs.

Mr. *A.* I have seen this method. It is called spearing of eels.

W. While I was looking at him, a

heron came flying over my head, with his large flagging wings. He lit at the next turn of the river, and I crept softly behind the bank to watch his motions. He had waded into the water as far as his long legs would carry him, and was standing with his neck drawn in, looking intently on the stream. Presently he darted his long bill as quick as lightning into the water, and drew out a fish, which he swallowed. I saw him catch another in the same manner. He then took alarm at some noise I made, and flew away slowly to a wood at some distance, where he settled.

Mr. *A*. Probably his nest was there for herons build upon the loftiest trees they can find, and sometimes in society together like rooks. Formerly, when these birds were valued for the amusement of hawking, many gentlemen had their *heronries*, and a few are still remaining.

W. I think they are the largest wild birds we have.

Mr. *A.* They are of a great length and spread of wing, but their bodies are comparatively small.

W. I then turned homeward across the meadows, where I stopped a while to look at a large flock of starlings which kept flying about at no great distance. I could not tell at first what to make of them; for they rose all together from the ground as thick as a swarm of bees, and formed themselves into a kind of black cloud, hovering over the field. After taking a short round they settled again, and presently rose again in the same manner. I dare say there were hundreds of them.

Mr. *A.* Perhaps so, for in the fenny countries their flocks are so numerous as to break down whole acres of reeds by settling on them. This disposition

of starlings to fly in close swarms was remarked even by Homer, who compares the foe flying from one of his heroes, to a *cloud* of stares retiring dismayed at the approach of the hawk.

W. After I had left the meadows, I crossed the corn-fields in the way to our house, and passed close by a deep marle pit. Looking into it, I saw in one of the sides a cluster of what I took to be shells; and upon going down, I picked up a clod of marle, which was quite full of them; but how sea shells could get there, I cannot imagine.

Mr. *A.* I do not wonder at your surprise, since many philosophers have been much perplexed to account for the same appearance. It is not uncommon to find great quantities of shells and relics of marine animals even in the bowels of high mountains, very remote from the sea. They are certainly proofs that the earth was once in

a very different state from what it is at present; but in what manner and how long ago these changes took place, can only be guessed at.

W. I got to the high field next our house just as the sun was setting, and I stood looking at it till it was quite lost. What a glorious sight! The clouds were tinged purple and crimson and yellow of all shades and hues, and the clear sky varied from blue to a fine green at the horizon. But how large the sun appears just as it sets! I think it seems twice as big as when it is over head.

Mr. *A*. It does so; and you may probably have observed the same apparent enlargement of the moon at its rising.

W. I have; but pray what is the reason of this?

Mr. *A*. It is an optical deception, depending upon principles which I can-

not well explain to you till you know more of that branch of science. But what a number of new ideas this afternoon's walk has afforded you! I do not wonder that you found it amusing; it has been very instructive too. Did *you* see nothing of all these sights, *Robert?*

R. I saw some of them, but I did not take particular notice of them.

Mr. *A.* Why not?

R. I don't know. I did not care about them, and I made the best of my way home.

Mr. *A.* That would have been right if you had been sent of a message; but as you only walked for amusement, it would have been wiser to have sought out as many sources of it as possible. But so it is—one man walks through the world with his eyes open, and another with them shut; and upon this difference depends all the superiority of

knowledge the one acquires above the other. I have known sailors, who had been in all the quarters of the world, and could tell you nothing but the signs of the tippling-houses they frequented in different ports, and the price and quality of the liquor. On the other hand, a Franklin could not cross the channel without making some observations useful to mankind. While many a vacant thoughtless youth is whirled throughout Europe without gaining a single idea worth crossing a street for, the observing eye and inquiring mind find matter of improvement and delight in every ramble in town or country. Do *you* then, *William*, continue to make use of your eyes; and *you*, *Robert*, learn that eyes were given you to use.

WHY THE EARTH MOVES ROUND THE SUN.

Papa—Lucy.

P. You remember, Lucy, that I explained to you some time ago what was the cause that things fell to the ground.

L. O yes—it was because the ground drew them to it.

P. True. That is a consequence of the universal law in nature, that bodies attract each other in proportion to their bulk. So a very small thing in the neighbourhood of a very large one always tends to go to it, if not prevented by some other power. Well—You know I told you that the sun was a ball a vast many times bigger than the ball we inhabit, called the earth; upon which you properly asked, how then it

happened that the earth did not fall into the sun.

L. And why does it not?

P. That I am going to explain to you. You have seen your brother whirl round an ivory ball tied to the end of a string which he held in his hand.

L. Yes—and I have done it myself too.

P. Well then—you felt that the ball was continually pulling, as if it tried to make its escape.

L. Yes; and one my brother was swinging *did* make its escape, and flew through the sash.

P. It did so. That was a lesson in the *centrifugal* motion, or that power by which a body thus whirled continually endeavours to fly off from the centre round which it moves. This is owing to the force or impulse you give it at setting out, as if you were going to

throw it away from you. The string by which you hold it, on the contrary, is the power which keeps the ball towards the centre, called the *centripetal* power. Thus you see there are two powers acting upon the ball at the same time, one to make it fly off, the other to hold it in; and the consequence is, that it moves directly according to neither, but between both; that is round and round. This it continues to do while you swing it properly; but if the string breaks or slips off, away flies the ball; on the other hand, if you cease to give it the whirling force, it falls towards your hand.

L. I understand all this.

P. I will give you another instance of this double force acting at the same time. Do not you remember seeing some curious feats of horsemanship?

L. Yes.

P. One of them was, that a man

standing with one leg upon the saddle, and riding full speed, threw up balls into the air, and catched them as they fell.

L. I remember it very well.

P. Perhaps you would have expected these balls to have fallen behind him, as he was going at such a rate.

L. So I did.

P. But you saw that they fell into his hand as directly, as if he had been standing quite still. That was because at the instant he threw them up, they received the motion of the horse straight forwards as well as the upright motion that he gave them, so that they made a slanting line through the air, and came down in the same place they would have reached if he had held them in his hand all the while.

L. That is very curious indeed!

P. In the same manner you may have observed, in riding in a carriage,

that if you throw any thing out of the window, it falls directly opposite, just as if the carriage was standing still, and is not left behind you.

L. I will try that the next time I ride in one.

P. You are then to imagine the sun to be a mighty mass of matter, many thousand times bigger than our earth, placed in the centre, quiet and unmoved. You are to conceive our earth, as soon as created, launched with vast force in a straight line, as if it were a bowl on a green. It would have flown off in this line for ever, through the boundless regions of space, had it not at the same instant received a pull from the sun by its attraction. By the wonderful skill of the Creator, these two forces were made exactly to counterbalance each other; so that just as much as the earth, from the original motion given it, tends to fly forwards, just so much

the sun draws it to the centre; and the consequence is, that it takes a course between the two, which is a circle round and round the sun.

L. But if the earth was set a rolling like a bowl upon a green, I should think it would stop of itself, as the bowl does.

P. The bowl stops because it is continually rubbing against the ground, which checks its motion, but the ball of the earth moves in empty space, where there is nothing to stop it.

L. But if I throw a ball through the air, it will not go on for ever, but it will come down to the ground.

P. That is because the force with which you can throw it is much less than the force by which it is drawn to the earth. But there is another reason too, which is the resistance of the air. This space all round us and over us is not empty space; it is quite full of a thin transparent fluid, called air.

L. Is it?

P. Yes. If you move your hand quickly through it, you will find something resisting you, though in a slight degree. And the wind, you well know, is capable of pressing against any thing with almost irresistible force; and yet wind is nothing but a quantity of air put into violent motion. Every thing then that moves through the air is continually obliged to push some of this fluid out of the way, by which means it is constantly losing part of its motion.

L. Then the earth would do the same.

P. No; for it moves in *empty space.*

L. What! does not it move through the air?

P. The earth does not move *through* the air, but carries the air along with it. All the air is contained in what is called the *atmosphere*, which you may compare to a kind of mist or fog clinging all round to the ball of the earth, and

reaching a certain distance above it, which has been calculated at above forty-five miles.

L. That is above the clouds, then.

P. Yes; all the clouds are within the atmosphere, for they are supported by the air. Well—this atmosphere rolls about along with the earth, as if it were a part of it, and moves with it through the sky, which is a vast field of empty space. In this immense space are all the stars and planets, which have also their several motions. There is nothing to stop them, but they continually go on, by means of the force that the Creator has originally impresed upon them.

L. Do not some of the stars move round the sun, as well as our earth?

P. Yes; those that are called *planets.* These are all subject to the same laws of motion with our earth. They are attracted by the sun as their centre,

and form, along with the earth, that assemblage of worlds, which is called the *solar system*.

L. Is the moon one of them?

P. The moon is called a *secondary* planet, because its immediate cannexion is with our earth, round which it rolls, as we do round the sun. It however accompanies our earth on its journey round the sun. But I will tell you more about its motion, and about the other planets and stars, another time. It is enough at present, if you thoroughly understand what I have been describing.

L. I think I do.

DIFFERENCE *and* AGREEMENT;

OR,

SUNDAY MORNING.

It was Sunday morning. All the bells were ringing for church, and the streets were filled with people moving in all directions.

Here, numbers of well-dressed persons, and a long train of charity children, were thronging in at the wide doors of a large handsome church. There, a smaller number, almost equally gay in dress, were entering an elegant meeting house. Up one alley, a Roman Catholic congregation was turning into their retired chapel, every one crossing himself with a finger dipped in holy-water as he went in. The opposite side of the street was covered with a train of

Quakers, distinguished by their plain and neat attire and sedate aspect, who walked without ceremony into a room as plain as themselves, and took their seats, the men on one side, and the women on the other, in silence. A spacious building was filled with an overflowing crowd of Methodists, most of them meanly habited, but decent and serious in demeanour; while a small society of Baptists in the neighbourhood quietly occupied their humble place of assembly.

Presently the different services began. The churches resounded with the solemn organ, and with the indistinct murmurs of a large body of people following the minister in responsive prayers. From the meetings were heard the slow psalm, and the single voice of the leader of their devotions. The Roman Catholic chapel was enlivened by strains of music, the tinkling of a small bell, and a perpetual change of

service and ceremonial. A profound silence and unvarying look and posture announced the self-recollection and mental devotion of the Quakers.

Mr. *Ambrose* led his son *Edwin* round all these different assemblies as a spectator. *Edwin* viewed every thing with great attention, and was often impatient to enquire of his father the meaning of what he saw; but Mr. *Ambrose* would not suffer him to disturb any of the congregations even by a whisper. When they had gone through the whole, *Edwin* found a great number of questions to put to his father, who explained every thing to him in the best manner he could. At length says *Edwin*,

But why cannot all these people agree to go to the same place, and worship God the same way?

And why should they agree? (replied his father.) Do not you see that people differ in a hundred other things?

Do they all dress alike, and eat and drink alike, and keep the same hours, and use the same diversions?

Aye—but those are things in which they have a right to do as they please.

And they have a right, too, to worship God as they please. It is their own business, and concerns none but themselves.

But has not God ordered particular ways of worshipping him?

He has directed the mind and spirit with which he is to be worshipped, but not the particular form and manner. That is left for every one to choose, according as suits his temper and opinions. All these people like their own way best, and why should they leave it for the choice of another? Religion is one of the things in which *mankind were made to differ.*

The several congregations now began to be dismissed, and the street was

again overspread with persons of all the different sects, going promiscuously to their respective homes. It chanced that a poor man fell down in the street in a fit of apoplexy, and lay for dead. His wife and children stood round him crying and lamenting in the bitterest distress. The beholders immediately flocked round, and, with looks and expressions of the warmest compassion, gave their help. A Churchman raised the man from the ground by lifting him under the arms, while a Dissenter held his head and wiped his face with his handkerchief. A Roman Catholic lady took out her smelling bottle, and assiduously applied it to his nose. A Methodist ran for a doctor. A Quaker supported and comforted the woman, and a Baptist took care of the children.

Edwin and his father were among the spectators. Here (said Mr. *Ambrose*) is a thing in which *mankind were made to agree.*

TWENTIETH EVENING.

ON METALS.

PART II.

Tutor—George—Harry.

T. WELL—have you forgot what I told you about metals the other day?

G. O no!

H. I am sure I have not.

T. What metals were they that we talked about?

G. Gold, silver, and quicksilver.

T. Suppose, then, we go on to the rest?

G. Pray do.

H. Yes, by all means.

T. Very well. You know *copper*, I don't doubt?

G. O yes!

T. What colour do you call it?

G. I think it is a sort of reddish brown.

T. True. Sometimes, however, it is of a bright red, like sealing-wax. It is not a very heavy metal, being not quite nine times the weight of water. It is very ductile, bearing to be rolled or hammered out to a very thin plate, and also to be drawn out to a fine wire.

H. I remember seeing a halfpenny that had been rolled out to a long ribbon.

G. Yes, and I have seen half a dozen men at a time with great hammers beating out a piece of copper at the brazier's.

T. Copper requires a very considerable heat to melt it; and by long exposure to the fire it may be burned or calcined; for it, like all we are now to speak of, is an *imperfect* metal.

H. And it rusts very easily, does it not?

T. It does; for all acids dissolve or corrode it, so do salts of every kind; whence even air and common water in a short time act upon it, for they are never free from somewhat of a saline nature.

G. Is not verdegris the rust of copper?

T. It is;—a rust produced by the acid of grapes. But every rust of copper is of a blue or green colour, as well as verdegris.

H. And are they all poison too?

T. They are all so in some degree, producing violent sickness and pain in the bowels. They are all, too, extremely nauseous to the taste; and the metal itself when heated, tastes and smells very disagreeably.

T. Why is it used, then, so much in cooking, brewing, and the like?

T. Because it is a very convenient metal for making vessels, especially large ones, as it is easily worked, and is sufficiently strong though hammered thin, and bears the fire well. And if vessels of it are kept quite clean, and the liquor not suffered to stand long in them when cold, there is no danger in their use. But copper vessels for cooking are generally lined on the inside with tin.

G. What else is copper used for?

T. A variety of things. Sheets of copper are sometimes used to cover buildings; and of late a great quantity is consumed in sheathing ships, that is, in covering all the part under water; the purpose of which is to protect the timber from the worms, and also to make the ship sail faster, by means of the greater smoothness and force with which the copper makes way through the water.

H. Money is made of copper too.

T. It is; for it takes an impression in coining very well, and its value is a proper proportion below silver, for a price for the cheapest commodities. In some poor countries they have little other than copper coin. Another great use of copper is as an ingredient in mixed metals, such as bell-metal, cannon-metal, and particularly brass.

H. But brass is yellow.

T. True; it is converted to that colour by means of another metallic substance named *zinc*, or *spelter*, the natural colour of which is white. A kind of brown stone called *calamine* is an ore of zinc. By filling a pot with layers of powdered calamine and charcoal placed alternately with copper, and applying a pretty strong heat, the zinc is driven in vapour out of the calamine, and penetrates the copper, changing it into brass.

G. What is the use of turning copper into brass?

F. It gains a fine gold-like colour, and becomes harder, more easy to melt, and less liable to rust. Hence it is preferred for a variety of utensils, ornamental and useful. Brass does not bear hammering well, but is generally cast into the shape wanted, and then turned in a lathe and polished. Well—these are the principal things I have to say about copper.

H. But where does it come from?

T. Copper is found in many countries. Our island yields abundance, especially in Wales and Cornwall. In Anglesey is a whole hill, called Paris mountain, consisting of copper-ore, from which immense quantities are dug every year. Now for *iron.*

H. Ay! that is the most useful of all the metals.

T. I think it is; and it is likewise

the most common, for there are few countries in the world possessing hills and rocks where it is not met with, more or less. Iron is the hardest of metals, the most elastic or springy, the most tenacious or difficult to break, next to gold, the most difficultly fusible, and one of the lightest, being only seven or eight times as heavy as water.

G. You say it is difficult to break; but I snapped the blade of a penknife the other day by only bending it a little; and my mother is continually breaking her needles.

T. Properly objected! but the qualities of iron differ extremely according to the method of preparing it. There are forged iron, cast iron, and steel, which are very different from each other. Iron, when first melted from its ore, has little malleability, and the vessels and other implements that are made of it in that state, by casting into

moulds are easily broken. It acquires toughness and malleability by *forging*, which is done by beating it when red hot with heavy hammers, till it becomes ductile and flexible. Steel, again, is made by heating small bars of iron with wood-ashes, charcoal, bone and horn shavings, or other inflammable matters, by which it acquires a finer grain and more compact texture, and becomes harder, and more elastic. Steel may be rendered either very flexible, or brittle, by different manners of *tempering*, which is performed by heating and then quenching it in water. Steel is iron in its more perfect state.

G. All cutting instruments are made of steel, are they not?

T. Yes; and the very fine edged ones are generally tempered brittle, as razors, penknives, and surgeons' instruments; but sword-blades are made flexible, and the best of them will bend

double without breaking or becoming crooked. The steel of which springs are made, has the highest possible degree of elasticity given it. A watch-spring is one of the most perfect examples of this kind. Steel for ornaments is made extremely hard and close-grained, so as to bear an exquisite polish. Common hammered iron is chiefly used for works of strength, as horse-shoes, bars, bolts, and the like. It will bend but not straighten itself again, as you may see in the kitchen poker. Cast iron is used for pots and caldrons, cannons, cannon-balls, grates, pillars, and many other purposes in which hardness, without flexibility, is wanted.

G. What a vast variety of uses this metal is put to!

T. Yes; I know not when I should have done, if I were to tell you of all.

H. Then I think it is really more

valuable than gold, though it is so much cheaper.

T. That was the opinion of the wise Solon, when he observed to the rich king Crœsus, who was shewing him his treasures, "he who possesses more iron, will soon be master of all this gold."

H. I suppose he meant weapons and armour.

T. He did; but there are many nobler uses for these metals; and few circumstances denote the progress of the arts in a country, more than having attained the full use of iron, without which scarcely any manufacture or machinery can be brought to perfection. From the difficulty of melting it out of the ore, many nations have been longer in discovering it than some of the other metals. The Greeks in Homer's time seem to have employed copper or brass for their weapons much more than iron; and the Mexicans and Peruvians,

who possessed gold and silver, were unacquainted with iron, when the Spaniards invaded them.

G. Iron is very subject to rust, however.

T. It is so, and that is one of its worst properties. Every liquor, and even a moist air corrode it. But the rust of iron is not pernicious: on the contrary it is a very useful medicine.

G. I have heard of steel drops and steel filings given for medicines.

T. Yes; iron is given in a variety of forms, and the property of them all is to strengthen the constitution. Many springs are made medicinal by the iron that they dissolve in the bowels of the earth. These are called *Chalybeate* waters, and they may be known by their inky taste, and the rust-coloured sediment they leave in their course.

H. May we drink such water if we meet with it?

T. Yes; it will do you no harm, at least. There is one other property of iron, well worth knowing, and that is that it is the only thing attracted by the magnet or loadstone.

G. I had a magnet once that would take up needles and keys; but it seemed a bar of iron itself.

T. True. The real loadstone, which is a particular ore of iron, can communicate its virtue to a piece of iron by rubbing it; nay, a bar of iron itself, in length of time, by being placed in a particular position, will acquire the same property.

G. Is all the iron used in England produced here?

T. By no means. Our extensive manufactures require a great importation of iron. Much is brought from Norway, Russia, and Sweden; and the Swedish is reckoned particularly excellent. Well—now to another metal.

I dare say you can tell me a good deal about *lead.*

H. I know several things about it: It is very heavy and soft, and easily melted.

T. True; these are some of its distinguishing properties. Its weight is between eleven and twelve times that of water. Its colour is a dull blueish white; and from this livid hue, as well as its being totally void of spring or elasticity, it has acquired a sort of character, of dulness and sluggishness. Thus we say of a stupid man, that he has a *leaden* disposition.

G. Lead is very malleable, I think.

T. Yes; it may be beaten out into a pretty thin leaf, but it will not bear drawing into fine wire. It is not only very fusible, but very readily calcined by heat, changing into a powder, or a scaly matter, which may be made to

take all colours by the fire, from yellow to deep red. You have seen red lead?

G. Yes.

T. That is calcined lead exposed for a considerable time to a strong flame. Lead may even be changed into glass by a moderate heat; and there is a good deal of it in our finest glass.

G. What is white lead?

T. It is lead corroded by the steam of vinegar. Lead in various forms is much used by painters. Its calces dissolve in oil, and are employed for the purpose of thickening paint and making it dry. All lead paints, however, are unwholesome as long as they continue to smell, and the fumes of lead when melted are likewise pernicious. This is the cause why painters and plumbers are so subject to various diseases, particularly violent colics and palsies. The white-lead manufacture is so hurt-

ful to the health, that the workmen in a very short time are apt to lose the use of their limbs, and be otherwise severely indisposed.

G. I wonder, then, that any body will work in it.

T. Ignorance and high wages are sufficient to induce them. But it is to be lamented that in a great many manufactures the health and lives of individuals are sacrificed to the convenience and profit of the community. Lead, too, when dissolved, as it may be in all sour liquors, is a slow poison, and the more dangerous, as it gives no disagreeable taste. A salt of lead made with vinegar is so sweet as to be called the sugar of lead. It has been too common to put this or some other preparation of lead into sour wines, in order to cure them; and much mischief has been done by this practice.

G. If lead is poisonous, is it not

wrong to make water-pipes and cisterns of it?

T. This has been objected to; but it does not appear that water can dissolve any of the lead. Nor does it readily rust in the air, and hence it is much used to cover buildings with, as well as to line spouts and water-courses. For these purposes the lead is cast into sheets, which are easily cut and hammered into any shape.

H. Bullets and shot, too, are made of lead.

T. They are; and in this way it is ten times more destructive than as a poison.

G. I think more lead seems to be used than any metal except iron.

T. It is; and the plenty of it in our country, is a great benefit to us; both for domestic use, and as an article that brings in much profit by exportation.

G. Where are our principal lead-mines?

T. They are much scattered about our island. The west of England produces a great deal, in Cornwall, Devonshire, and Somersetshire. Wales affords a large quantity. Derbyshire has long been noted for its lead-mines, and so have Northumberland and Durham. And there are considerable ones in the southern part of Scotland. Now do you recollect another metal to be spoken about?

G. Tin.

T. True. Tin resembles lead in colour, but has a more silvery whiteness. It is soft and flexible, like lead, but is distinguished by the crackling noise it makes on being bent. It melts as easily as lead, and also is readily calcined by keeping it in the fire. It is the lightest of the metals, being only seven times as heavy as water. It may

be beaten into a thin leaf, but not drawn out to wire.

G. Is tin of much use?

T. It is not often used by itself, but very frequently in conjunction with other metals. As tin is little liable to rust, or to be corroded by common liquors, it is employed for a lining or coating of vessels made of copper or iron. The saucepans and kettles in the kitchen, you know, are all tinned.

G. Yes. How is it done?

T. By melting the tin, and spreading it upon the surface of the copper, which is first lightly pitched over, in order to make the tin adhere.

H. But what are the vessels made at the tinman's? Are they not all tin?

T. No. *Tinned*-ware (as it is properly called) is made of thin iron plates, coated over with tin by dipping them into a vessel full of melted tin. These plates are afterwards cut and bent to

proper shapes, and the joinings are soldered together with a mixture of tin and other metals. Another similar use of tin is in what is called the silvering of pins.

G. What—is not that real silvering?

T. No. The pins which are made of brass wire, after being pointed and headed, are boiled in water in which grain-tin is put along with tartar, which is a crust that collects on the inside of wine casks. The tartar dissolves some of the tin, and makes it adhere to the surface of the pins, and thus thousands are covered in an instant.

H. That is as clever as what you told us of the gilding of buttons.

T. It is. Another purpose for which great quantities of tin used to be employed, was the making of pewter. The best pewter consists chiefly of tin, with a small mixture of other metals to harden it; and the London pewter was

brought to such perfection as to look almost as well as silver.

G. I can just remember a long row of pewter plates at my grandmother's.

T. You may. In her time all the plates and dishes for the table were made of pewter, and a handsome range of pewter shelves was thought a capital ornament for a kitchen. At present this trade is almost come to nothing through the use of earthen ware and china; and pewter is employed for little but the worms of stills and barbers' basins, and porter pots. But a good deal is still exported. Tin is likewise an ingredient in other mixed metals for various purposes, but, on the whole, less of it is used than of the other common metals.

G. Is not England more famous for tin than any other country? I have read of the Phœnicians trading here for it in very early times.

T. They did; and tin is still a very

valuable article of export from England. Much of it is sent as far as China. The tin mines are chiefly in Cornwall, and I believe they are the most productive of any in Europe. Very fine tin is also got in the peninsula of Malacca in the East Indies. Well—we have now gone through the metals.

G. But you said something about a kind of metal called zinc.

T. That is one of another class of mineral substances, called *semimetals.* These resemble metals in every quality but ductility, of which they are almost wholly destitute, and for want of it, they can seldom be used in the arts, except when joined with metals.

G. Are there many of them?

T. Yes, several; but we will not talk of them till I have taken some opportunity of showing them to you, for probably you may never have seen any of them. Now try to repeat the

names of all the metals to me in the order of their weight.

H. There is first *gold.*

G. Then *quicksilver, lead, silver.*

H. *Copper, iron, tin.*

T. Very right. Now I must tell you of an odd fancy that chemists have had of christening these metals by the names of the heavenly bodies. They have called gold, *Sol* or the Sun.

G. That is suitable enough to its colour and brightness.

H. Then silver should be the moon, for I have heard moonlight called of a silvery hue.

T. True—and they have named it so. It is *Luna.* Quicksilver is *Mercury*, so named probably from its great propensity to dance and jump about, for *Mercury*, you know, was very nimble.

G. Yes—he had wings to his heels.

T. Copper is *Venus.*

G. Venus! surely it is scarcely beautiful enough for that.

T. But they had disposed of the most beautiful ones before. Iron is *Mars.*

H. That is right enough, because swords are made of iron.

T. True. Then tin is *Jupiter*, and lead *Saturn;* I suppose only to make out the number. Yet the dulness of lead might be thought to agree with that planet which is most remote from the sun. These names, childish as they may seem, are worth remembering, since chemists and physicians still apply them to many preparations of the various metals. You will, probably, often hear of *martial*, *lunar*, *mercurial*, and *saturnine ;* and you may now know what they mean.

G. I think the knowledge of metals seems more useful than all you have told us about plants.

T. I don't know that. Many nations make no use at all of metals, but there are none which do not owe a great part of their subsistence to vegetables. However, without inquiring what parts of natural knowledge are *most* useful, you may be assured of this, that all are useful in some degree or other; and there are few things that give one man greater superiority over another, than the extent and accuracy of his knowledge in these particulars. One person passes all his life upon the earth, a stranger to it; while another finds himself at home every where.

WHAT ANIMALS ARE MADE FOR.

Pray, Papa, (said *Sophia* after she had been a long while teazed with the flies that buzzed about her ears, and

settled on her nose and forehead as she sat at work)—Pray what were flies made for?

For some good, I dare say, (replied her Papa.)

S. But I think they do a great deal more harm than good, for I am sure they plague me sadly; and in the kitchen they are so troublesome, that the maids can hardly do their work for them.

P. Flies eat up many things that would otherwise corrupt and become loathsome; and they serve for food to birds, spiders, and many other animals.

S. But we could clean away every thing that was offensive without their help; and as to their serving for food, I have seen whole heaps of them lying dead in a window, without seeming to have done good to any thing.

P. Well, then. Suppose a fly ca-

pable of thinking; would he not be equally puzzled to find out what men were good for? This great two-legged monster, he might say, instead of helping us to live, devours more food at a meal than would serve a whole legion of flies. Then he kills us by hundreds when we come within his reach, and I see him destroy and torment all other animals too. And when he dies, he is nailed up in a box, and put a great way under ground, as if he grudged doing any more good after his death, than when alive. Now what would you answer to such a reasoning fly?

S. I would tell him he was very impertinent for talking so of his betters; for that he and all other creatures were made for the use of man, and not man for theirs.

P. But would you tell him true? You have just been saying that you could not find out of what use flies were

to us: whereas, when they suck our blood, there is no doubt that we are of use to them.

S. It is that which puzzles me.

P. There are many other animals which we call *noxious*, and which are so far from being useful to us, that we take all possible pains to get rid of them. More than that, there are vast tracts of the earth where few or no men inhabit, which are yet full of beasts, birds, insects, and all living things. These certainly do not exist there for his use alone. On the contrary, they often keep man away.

S. Then what are they made for?

P. They are made to be happy. It is a manifest purpose of the Creator to give being to as much life as possible, for life is enjoyment to all creatures in health and in possession of their faculties. Man surpasses other animals in his powers of enjoyment, and he has prospects in a future state which they

do not share with him. But the Creator equally desires the happiness of all his creatures, and looks down with as much benignity upon these flies that are sporting around us, as upon ourselves.

S. Then we ought not to kill them, if they are ever so troublesome.

P. I do not say that. We have a right to make a reasonable use of all animals for our advantage, and also to free ourselves from such as are hurtful to us. So far our superiority over them may fairly extend. But we should never abuse them for our mere amusement, nor take away their lives wantonly. Nay, a good natured man will rather undergo a *little* inconvenience, than take away from a creature all that it possesses. An infant may destroy life, but all the kings upon earth cannot restore it. I remember reading of a good-tempered old gentleman, that having been a long time plagued with a great fly that buzzed about his face

all dinner time, at length, after many efforts, caught it. Instead of crushing it to death, he held it carefully in his hand, and opening the window, "Go, (said he)—get thee gone, poor creature; I won't hurt a hair of thy head; surely the world is wide enough for thee and me."

S. I should have loved that man.

P. One of our poets has written some very pretty lines to a fly that came to partake with him of his wine. They begin,

> Busy, curious, thirsty fly,
> Drink with me, and drink as I;
> Welcome freely to my cup,
> Couldst thou sip and sip it up.

S. How pretty! I think they will almost make me love flies. But pray, Papa, do not animals destroy one another?

P. They do indeed. The greatest part of them only live by the destruction of life. There is a perpetual warfare

going on, in which the stronger prey upon the weaker, and, in their turns, are the prey of those which are a degree stronger than themselves. Even the innocent sheep, with every mouthful of grass, destroys hundreds of small insects. In the air we breathe, and the water we drink, we give death to thousands of invisible creatures.

S. But is not that very strange? If they were created to live and be happy, why should they be destroyed so fast?

P. They are destroyed no faster than others are produced; and if they enjoyed life while it lasted, they have had a good bargain. By making animals the food of animals, Providence has filled up every chink, as it were, of existence. You see these swarms of flies. During all the hot weather they are continually coming forth from the state of eggs and maggots, and as soon as they get the use of wings, they roam about

and fill every place in search of food. Meantime they are giving sustenance to the whole race of spiders; they maintain all the swallow tribe, and contribute greatly to the support of many other small birds; and even afford many a delicate morsel to the fishes. Their own numbers, however, seem scarcely diminished, and vast multitudes live on till the cold weather comes and puts an end to them. Were nothing to touch them, they would probably become so numerous as to starve each other. As it is, they are full of enjoyment themselves, and afford life and enjoyment to other creatures, which in their turn supply the wants of others.

S. It is no charity, then, to tear a spider's web in pieces in order to set a fly at liberty.

P. None at all—no more than it would be to demolish the traps of a

poor Indian Hunter, who depended upon them for his dinner. They both act as nature directs them. Shall I tell you a story?

S. O yes—pray do.

P. As a venerable Bramin, who had never in his days eaten any thing but rice, fruits, and milk, and held it the greatest of crimes to shed the blood of any thing that had life, was one day meditating on the banks of the Ganges, he saw a little bird on the ground picking up ants as fast as he could swallow. Murderous wretch, cried he, what scores of lives are sacrificed to one gluttonous meal of thine! Presently a sparrow-hawk, pouncing down, seized him in his claws and flew off with him. The Bramin was at first inclined to triumph over the little bird; but on hearing his cries, he could not help pitying him. Poor thing, said he, thou art

fallen into the clutches of thy tyrant! A stronger tyrant, however, took up the matter; for a falcon in mid air darting on the sparrow-hawk, struck him to the ground, with the bird lifeless in his talons. Tyrant against tyrant, thought the Bramin, is well enough. The falcon had not finished tearing his prey, when a lynx stealing from behind a rock on which he was perched, sprung on him, and having strangled him, bore him to the edge of a neighbouring thicket, and began to suck his blood. The Bramin was attentively viewing this new display of retributive justice, when a sudden roar shook the air, and a huge tiger, rushing from the thicket, came like thunder on the lynx. The Bramin was near enough to hear the crashing bones, and was making off in great terror, when he met an English soldier, armed with his musket. He pointed

eagerly to the place where the tiger was making his bloody repast. The soldier levelled his gun, and laid the tiger dead. Brave fellow! exclaimed the Bramin. I am very hungry, said the soldier, can you give me a beef-steak? I see you have plenty of cows here. Horrible! cried the Bramin; what? I kill the sacred cows of Brama. Then kill the next tiger yourself, said the soldier.

THE END OF VOL. IV.

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